

26. EXTENSION OF RANGE OF *ENNEAPTERYGIUS*  
*OBTUSIROSTRE*, WITH NOTES ON ITS ECOLOGY

(With two text-figures)

In the handnet catches from the tidepools off Visakhapatnam (17°41' N, 83°17' E) specimens of *Enneapterygius obtusirostre* (Kluzinger) were a regular feature. The species is so far known only from the Western Indian Ocean (Smith 1961). As such the present record from Eastern India forms an additional distributional record.

*Description*: D III, XIII (XII in one specimen, XIV in one specimen), 9-10; A I, 17-19; P 15-16; V I, 2; C 9; lateral line series 34-36 (33 in one specimen); gill rakers 0+1+6 (one may be rudimentary on long arm).

As percentage of standard length: total length 118.46-126.42; body depth 18.03-24.59; head length 30.0-35.85; snout length 8.0-11.54; eye diameter 0.8-11.48; interorbital distance 3.23-4.92; postorbital 13.33-18.75; pastoral length 30.0-33.85; ventral length 20.0-25.0; depth of caudal peduncle 7.69-10.0; distance from snout tip to dorsal 22.64-30.0; to anal 50.0-56.14, to pectoral 29.51-35.09, to ventral 18.87-28.07.

As percentage of head length: Snout length 25.0-35.29; eye diameter 26.32-35.0; interorbital distance 0.09-15.79; postorbital 44.0-56.25.

SIZE:

Body deepest below first dorsal, scales ctenoid, head and basal part of first dorsal naked, head dorso-ventrally flattened, mouth moderate with snout slightly produced, teeth minute, curved and sharp in a single row anteriorly, vomer and palate devoid of teeth; eyes large, maxilla reaches below anterior margin of eye; single nasal cirrus, supra-orbital cirrus

leaf-like, simple, sometimes with 2-4 free tips; pre-opercular margins and angle smooth; 3 dorsal fins present, first two fins with delicate spines, first spine of the first dorsal is the longest, dorsal rays longer than spines and reach 1/3 of caudal peduncle; anal rays longer than the spine and reach 2/3 of caudal peduncle when folded back, ventral does not reach vent, pectorals reach beyond vent, caudal truncate with edges round.

*Colour*: FEMALE (Fig. 1) — Very pale brown with orange and brown melanophores which more or less form 5 irregular oblique bands on body. Chin and throat possess only orange melanophores. Chest and belly white without any melanophores. Dorsal fin hyaline, the membrane between first and second spines of first dorsal is black. Other fins pale yellow, base of pectoral has an inconspicuous brown blotch, caudal with 4 vertical, discontinuous bands.

MALE (Fig. 2) — Grey with vague bands, nape brown with black melanophores. The spaces between nares, postorbitals, bases of pectorals, pelvics and belly are orange. Cheeks, chin, throat, part of operculum and pectorals are lustrous green with blue spots in live condition and turn black after death. A prominent blue black ocellus on the base of pectoral, 2 black longitudinal lines on second dorsal, dark grey anal are characteristic.

*Ecology*: This little fish occurs only in lower level tidepools which are totally exposed during low tides. As such the salinity of the pool water varies from time to time and sometimes touches 43‰ during summer when low tides prevail for long periods. The

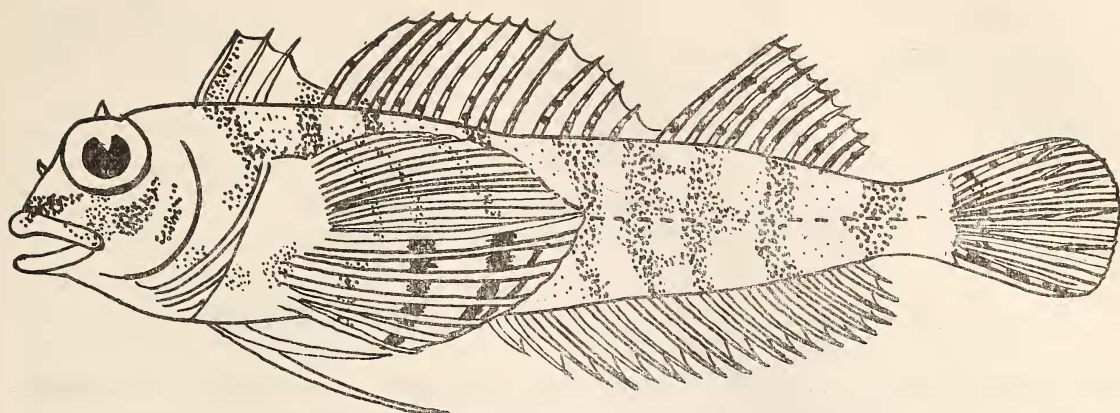


Fig. 1. *Enneapterygius obtusirostre* (Kluzinger): Female.

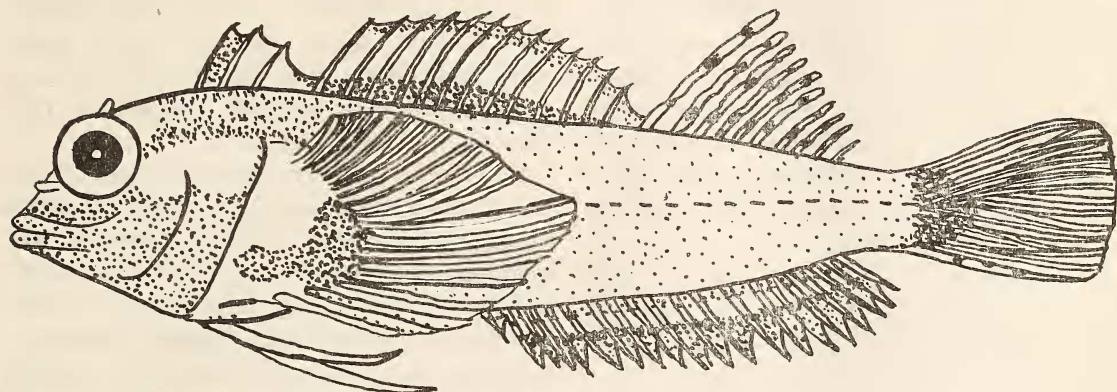


Fig. 2. *Enneapterygius obtusirostre* (Kluzinger): Male.

diel oxygen content and pH varies abnormally as does the temperature. It is an excellent example for camouflage and concealment and is rather difficult to locate as it blends perfectly with the weeds. They are encountered all through the year but more frequently during October-February which is apparently their breeding period. The chief food for this fish is the phytal fauna occurring on the algal thalli

of *Enteromorpha*, *Caulerpa*, etc. This tiny fish picks up the tinier fauna with utmost delicacy, aided by the large pectorals and wide eyes. It also eats small molluscs.

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27. ON A FREAK OF *ISTIBLENNIUS STRIATOMACULATUS*

While studying the fish fauna of rock-pools along the coastline between Visakhapatnam and Bheemunipatnam (17°40'-54'N, 83°16'-28'E), a blennid fish possessing abnormal vertical fins was collected on August 10, 1979. It was identified as *Istiblennius striatomaculatus* (Kner 1866) Smith-Vaniz & Springer (1971) of the tribe Salariini in the family Blenniidae. A brief description of this abnormal fish is provided with a comparison of its features with those of a normal fish of about the same standard length.

The specimen is characterised by D XIII, 20; A III, 22; p. 14; V I, 3; C 3; supra-orbital cirri 6; nasal cirri 2; gill rakers 2+1+12.

*Percentage of Standard Length:*

Total length 112.77; body depth 20.21; head length 23.40; eye diameter 6.38; inter-orbital distance 2.13; orbital cirrus 5.32; nasal cirrus 2.13; distance between dorsal notch and caudal base 44.68.

*Percentage of Head Length:*

Eye diameter 27.27; inter-orbital distance 0.09; orbital cirrus 22.73; nasal cirrus 9.09.

The body is anguilliform and naked with prominent forehead and eyes, nasal cirrus twice branched and supra-orbital cirrus having 6 branches. The spinous dorsal is a little lower than the soft dorsal, mid-spines being longer;

the 13th spine is the smallest, lying hidden in the notch between the soft and spinous parts of dorsal. Membrane of the dorsal fused with that of caudal fin. Last dorsal ray comparatively much elongated, curved and continued parallel with caudal fin rays. Anal spines small and hidden, first spine positioned as a small papilla after the vent, and anal fin base adjacent to that a caudal fin.

Body olive with brown spots and streaks and 6 pairs of brown bands descend rather irregularly; under-parts lighter without any markings. A small black spot between the 1st and the 2nd dorsal spine and another between 2nd and 3rd dorsal spine. Spinous part of the dorsal fin with brownish wavy lines running posteriorly and inclining gradually towards the base. Rayed portion has several zigzag lines. Pectoral fin pale with semicircular rows of brown spots. Caudal fin olive with brown spots arranged in semicircles.

This description conforms quite closely with that for *I. striatomaculatus* provided by Smith (1959). However, there are some deviations. The abnormal fish has an additional anal spine and only three caudal rays in the retarded tail as against 13 in the normal. Furthermore, the dorsal fin is united completely with the caudal fin and the anal has come to be very close to the caudal fin.

In taxonomic studies, it is a general prac-